

What is Claimed is:

1. A liquid crystal display panel, comprising:
 - a first substrate having a groove around a predetermined area;
 - a second substrate having a ridge that extends into the groove; and
 - a liquid crystal layer interposed between the first and second substrates,wherein the liquid crystal is over the predetermined area.
2. A liquid crystal display panel according to claim 1, further including a seal between the first and second substrates.
3. A liquid crystal display panel according to claim 1, wherein the first and second substrates are transparent.
4. A liquid crystal display panel according to claim 3, wherein the first and second substrates are glass.
5. A liquid crystal display panel according to claim 1, wherein the groove is formed in a patterned material.
6. A liquid crystal display panel according to claim 5, wherein the patterned material is formed of an organic compound or of a photoresist.

7. A liquid crystal display panel according to claim 1, wherein the ridge is formed in a patterned material.

8. A liquid crystal display panel according to claim 7, wherein the patterned material is formed of an organic compound or of a photoresist.

9. A liquid crystal display panel according to claim 1, wherein the second substrate includes a black matrix and color filters.

10. A liquid crystal display panel according to claim 1, wherein the predetermined area includes a thin film transistor array.

11. An LCD panel, comprising:

a first substrate having a predetermined area;

a first patterned material on said first substrate, said first material having a groove around said predetermined area;

a second substrate adjacent said first substrate;

a second patterned material on said second substrate, said second patterned material having a ridge that extends into said groove;

a seal between said first substrate and said second substrate; and,

a liquid crystal interposed between said first substrate and said second substrate and on said predetermined area.

12. An LCD panel as claimed in claim 11, wherein said first patterned material and said second patterned material are formed from an organic compound.

13. An LCD panel as claimed in claim 11, wherein said first patterned material and said second patterned material are formed from photoresist.

14. A method of fabricating a liquid crystal display panel, comprising:

(a) forming a first substrate with a groove around a display region;

(b) forming a second substrate with a ridge that can fit into the groove;

(c) coating a sealing material such that the sealing material is disposed around

the display area;

(d) locating a liquid crystal over the display region; and

(e) bonding the first substrate to the second substrate with the sealing material

such that the ridge fits into the groove and such that the liquid crystal is between the first substrate and the second substrate.

15. A method as claimed in claim 14, wherein the groove is formed in a patterned material.

16. A method as claimed in claim 15, wherein the patterned material includes an organic compound.

17. A method as claimed in claim 15, wherein the patterned material includes a photoresist.

18. A method as claimed in claim 14, wherein the ridge is formed in a patterned material.

19. A method as claimed in claim 18, wherein the patterned material includes an organic compound.

20. A method as claimed in claim 18, wherein the patterned material includes a photoresist.

21. A method as claimed in claim 14, wherein the second substrate includes a black matrix.

22. A method as claimed in claim 14, wherein the second substrate includes a color filter.

23. A method as claimed in claim 14, wherein bonding the first substrate to the second substrate is performed by pressing the first substrate and the second substrate together.

24. A method for fabricating an LCD panel, comprising the steps of:

(a) forming a first substrate with an array area;

(b) forming a first patterned material on the first substrate, wherein the first patterned material includes a groove around the array area;

(c) forming color filters on a second substrate;

(d) forming a second patterned material on the second substrate, wherein the second patterned material includes a ridge dimensioned to align with the groove;

(e) locating a liquid crystal inside the ridge; and

(f) bonding the first and second substrates together using a sealing material disposed around the array area.

25. A method as claimed in claim 24, wherein the first patterned material includes an organic compound.

26. A method as claimed in claim 24, wherein the first patterned material includes a photoresist.

27. A method as claimed in claim 24, wherein the second patterned material includes an organic compound.

28. A method as claimed in claim 24, wherein the second patterned material includes a photoresist.